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APPARATUS FOR, AND METHOD OF, VARYING THE  
RATE OF FLOW OF FLUID ALONG A PATHWAY

ABSTRACT

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An apparatus for varying the rate of flow of a fluid in a pathway by the use of deformable valves and clamps which change their size, position, state or function on application of heat and/or pressure is described. A disposable chemical assay device 10 (10), and a method of using the device incorporating the apparatus are also described. The assay device (10) includes an inlet port (12), a reaction chamber (14), a waste depot (16), a filter chamber (18), a processing chamber (20), wash solution/reagent reservoirs (22) and (24), an array of metered readout cells (26, 28, 30 and 32), and breather tubes (11 and 13). The invention, in a preferred embodiment, offers an 15 advantage over existing assay devices because the condition or state of the deformable valves and clamps may be changed. Therefore more complex operations and procedures may be performed by the assay device (10) than has been previously achievable.

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(Figure 1)